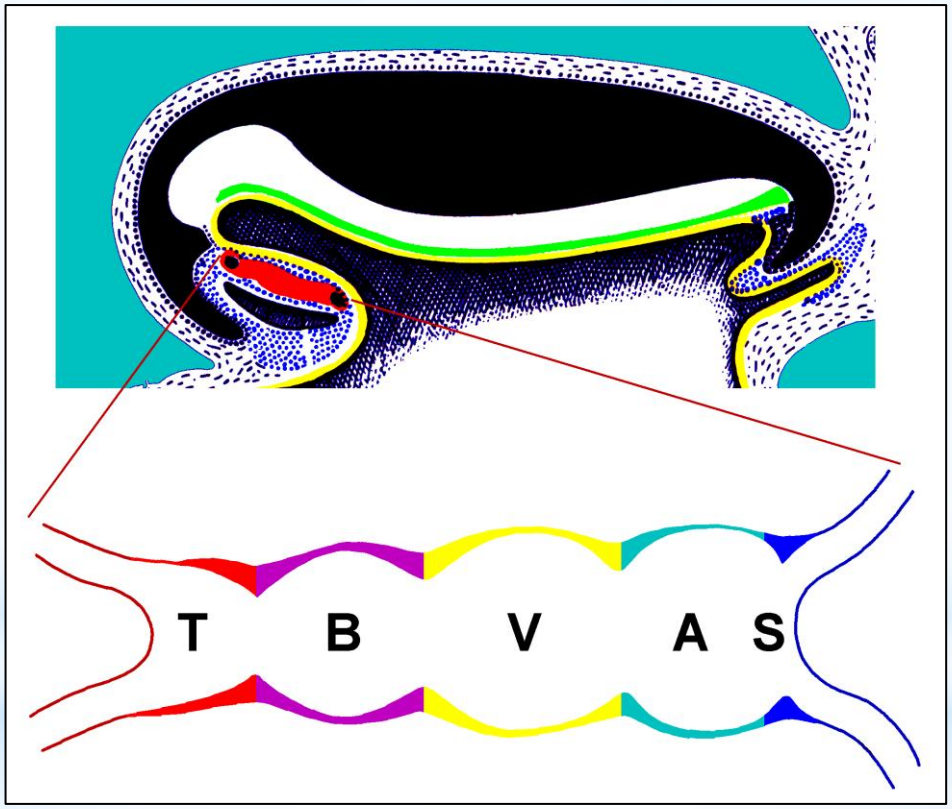
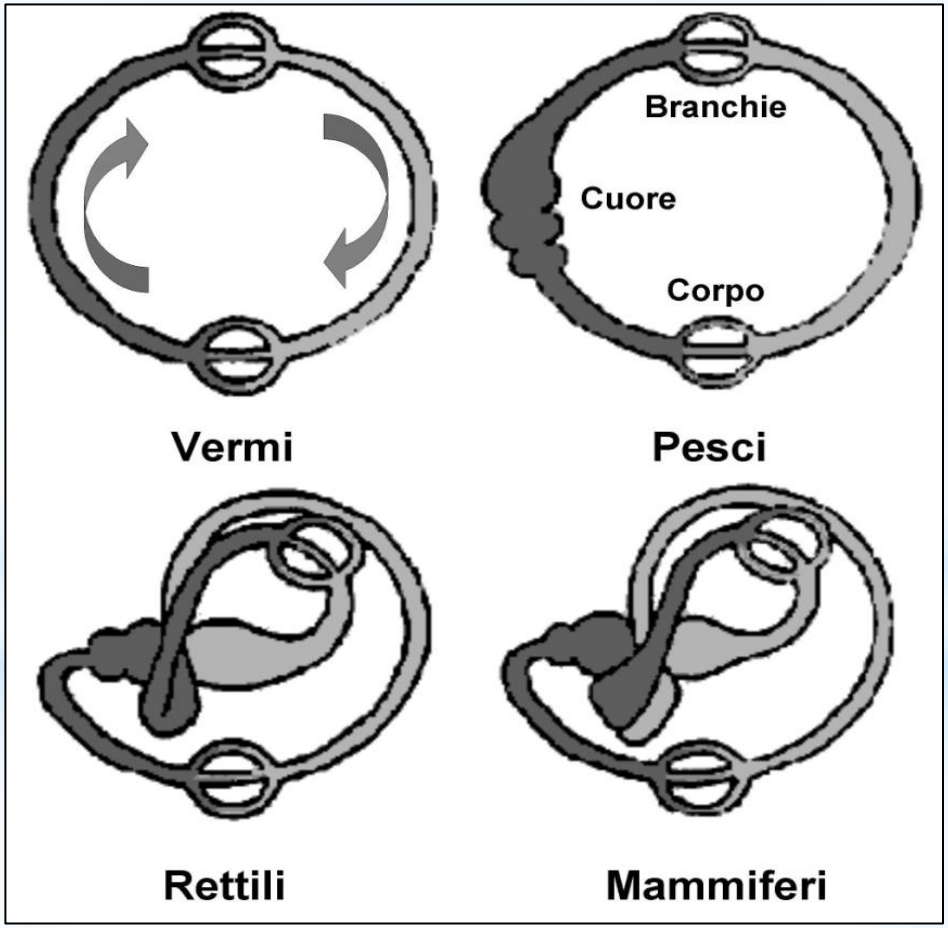
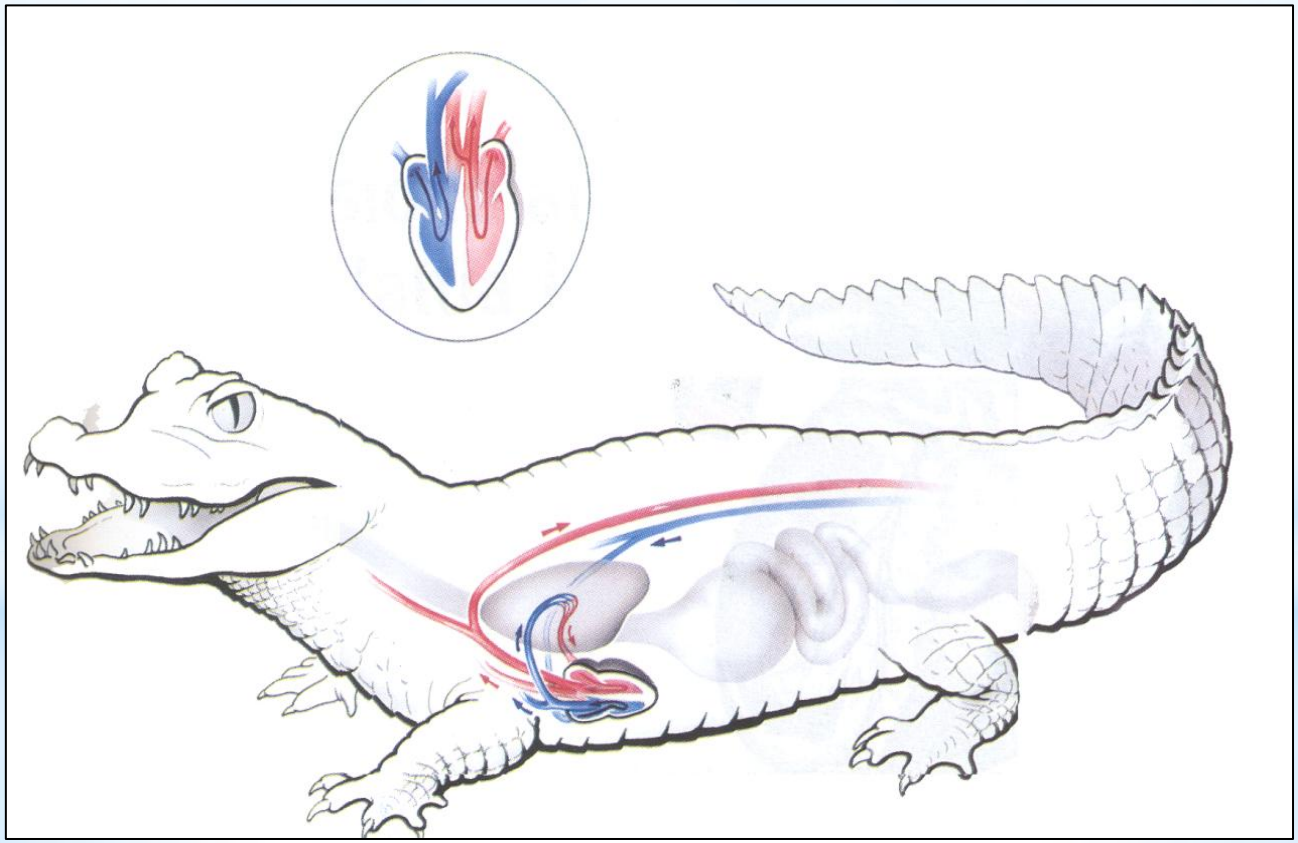
Il cuore simbolo dell'umanità

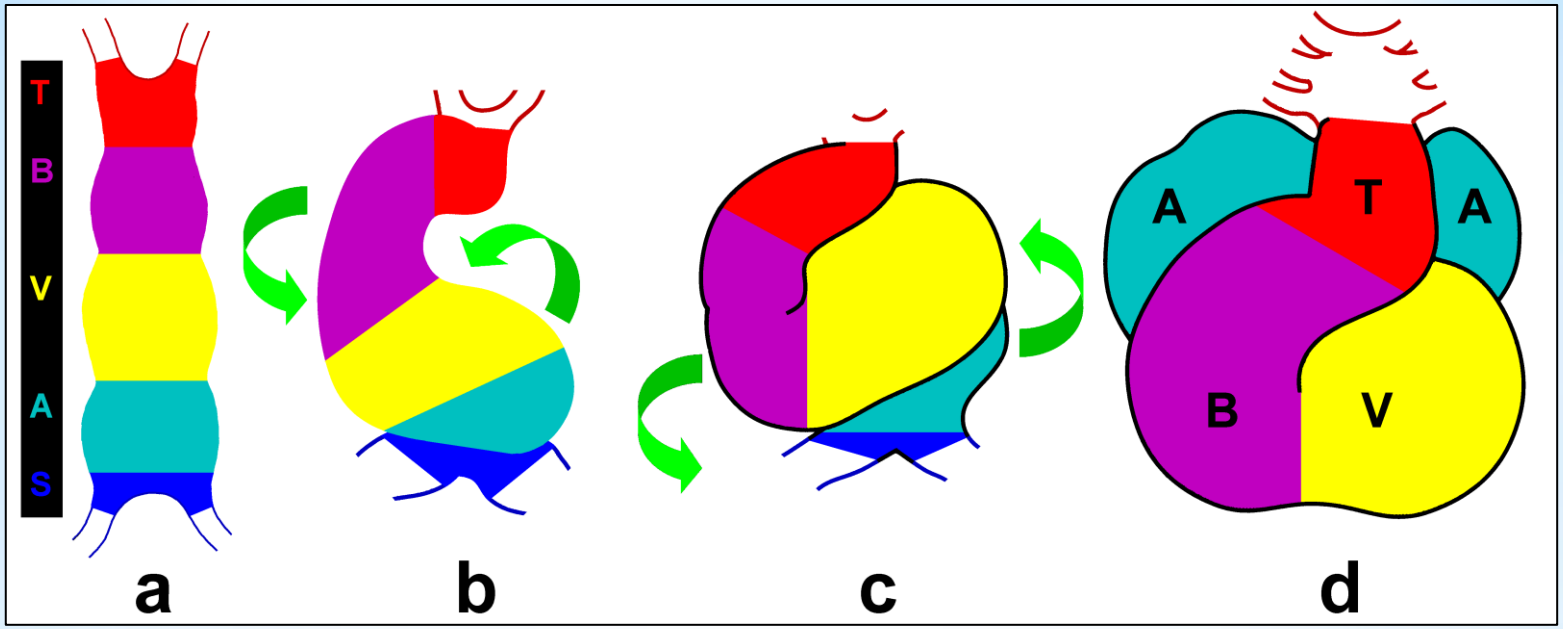
IL CUORE.
STORIA DI UN ORGANO,
DI UN SIMBOLO,
DI UN'ICONA



* Embrione e tubo cardiaco primitivo al 22-23 giorno. Notocorda in verde. T = Tronco arterioso primitivo; B = Bulbo cardiaco; V = Ventricolo primitivo; A = Atrio primitivo; S = Seno venoso.


Branchie
Cuore
Corpo
Vermi
Pesci
Rettili
Mammiferi





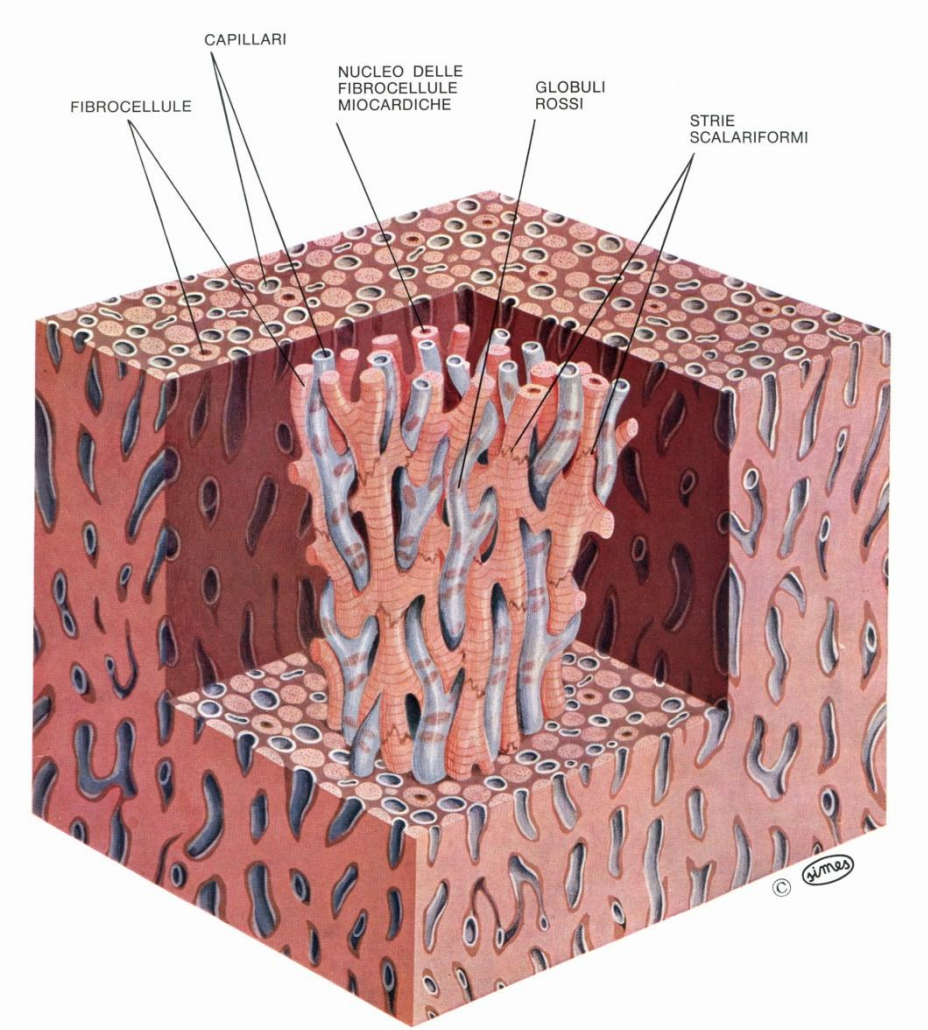
* Primi stadi di sviluppo del cuore.

a) Tubo cardiaco;

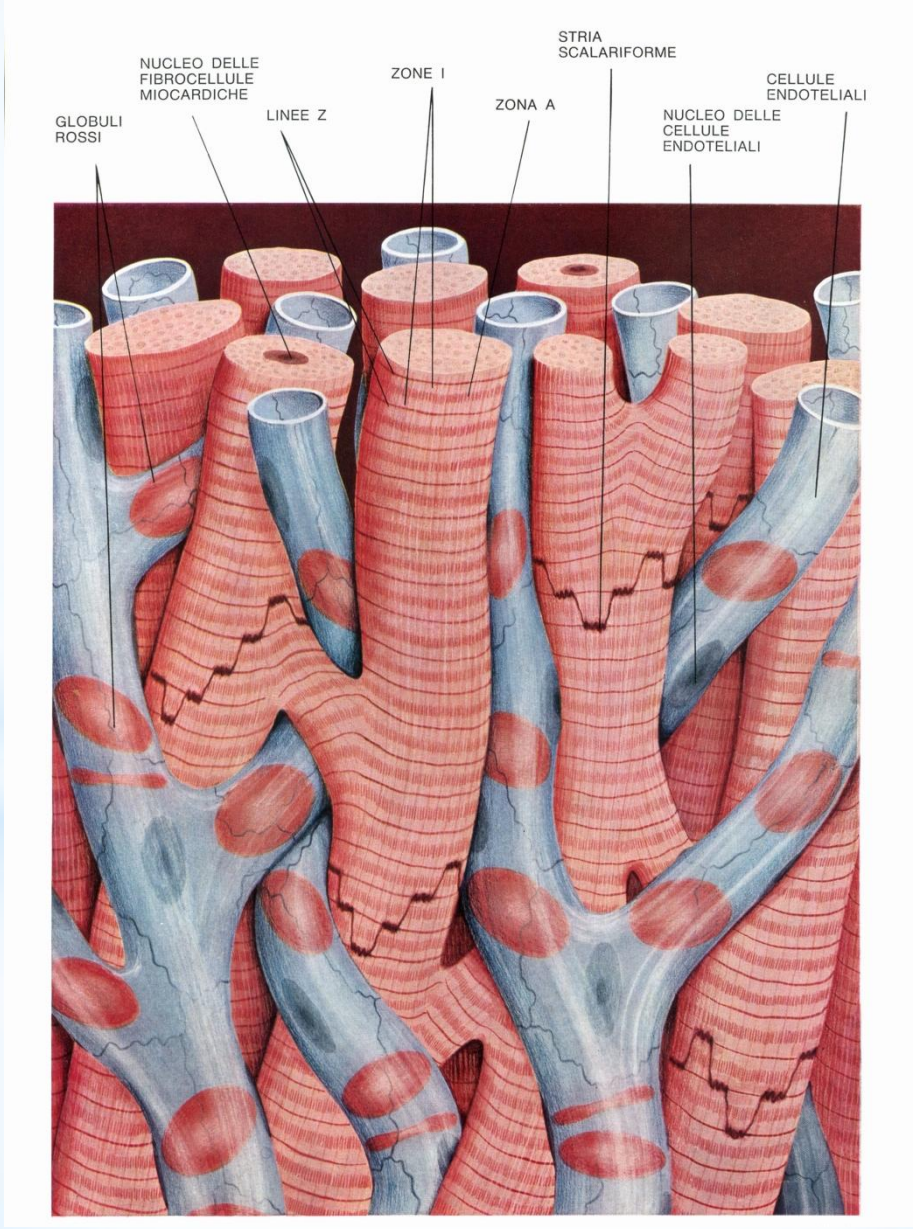
b) Accrescimento antero-infero-laterale del Bulbo cardiaco, seguito dal Ventricolo primitivo;

c) Spostamento antero-inferiore per accrescimento del Bulbo cardiaco-Ventricolo primitivo e formazione dell'ansa a U, con conseguente posteriorizzazione dell'Atrio primitivo-Seno venoso;

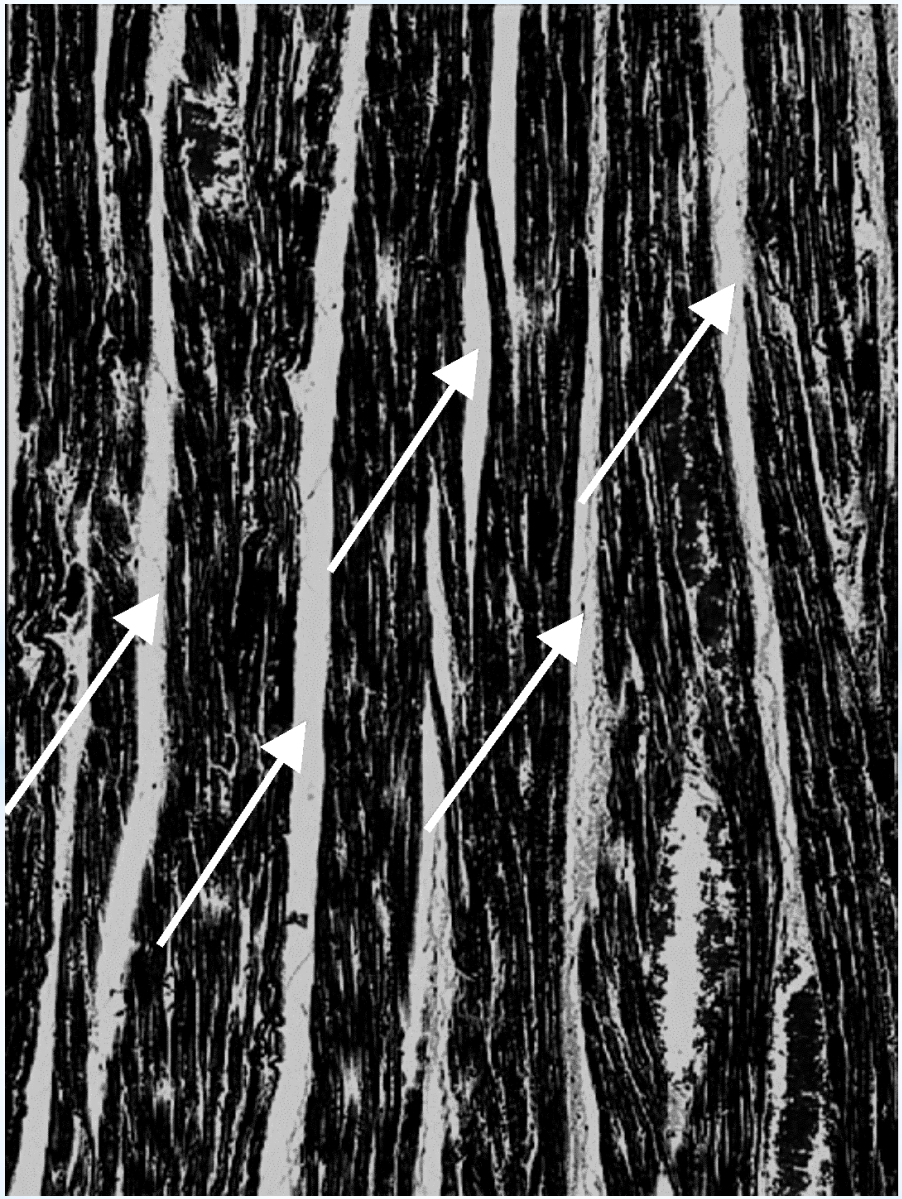
d) Situazione al 28-29° giorno con il Bulbo cardiaco, a destra, e il Ventricolo primitivo, a sinistra, antero-inferiormente alll'Atrio primitivo. T = Tronco arterioso primitivo; B = Bulbo cardiaco; V = Ventricolo primitivo; A = Atrio primitivo; S = Seno venoso.



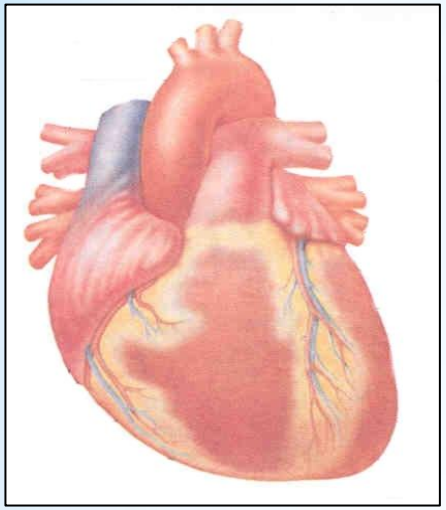
* Il tessuto miocardico



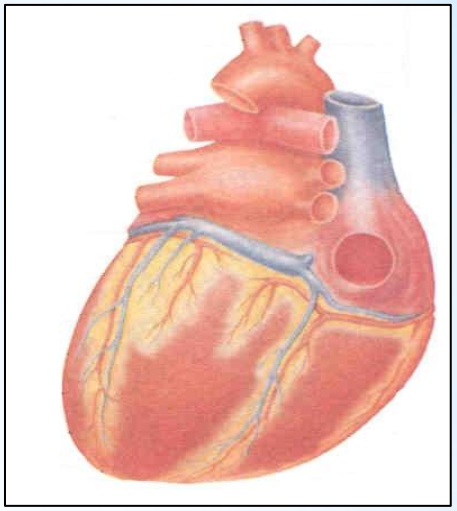
* Le fibre cardiache

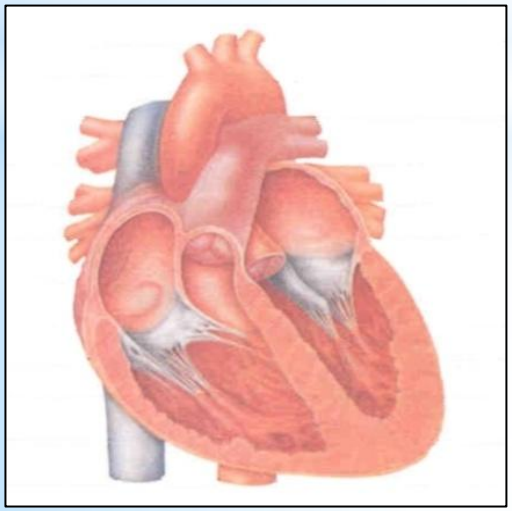


* Cuore visto frontalmente

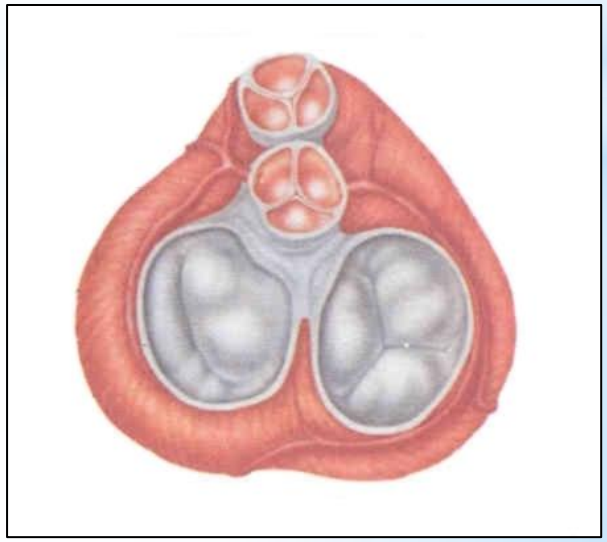


* Cuore visto dorsalmente

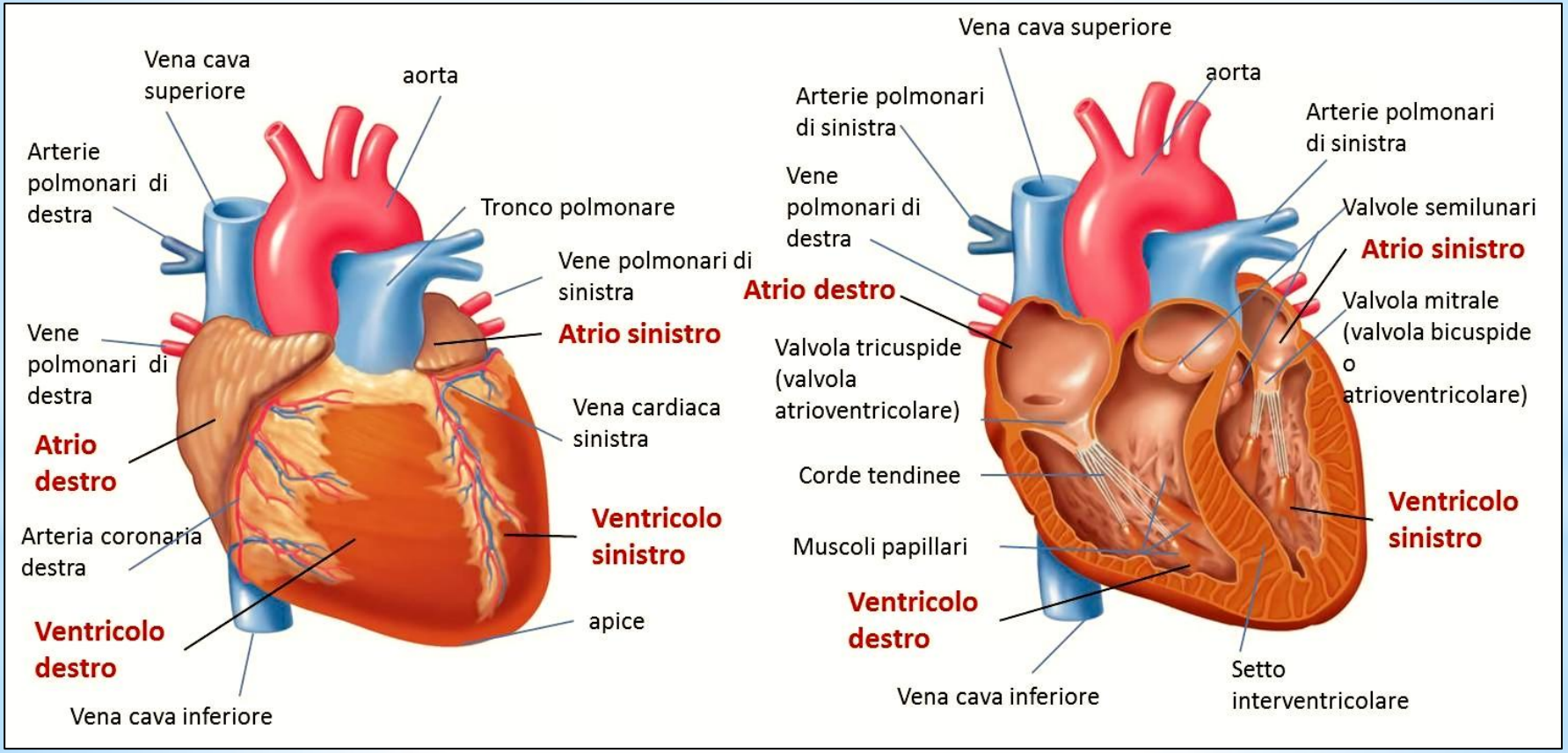




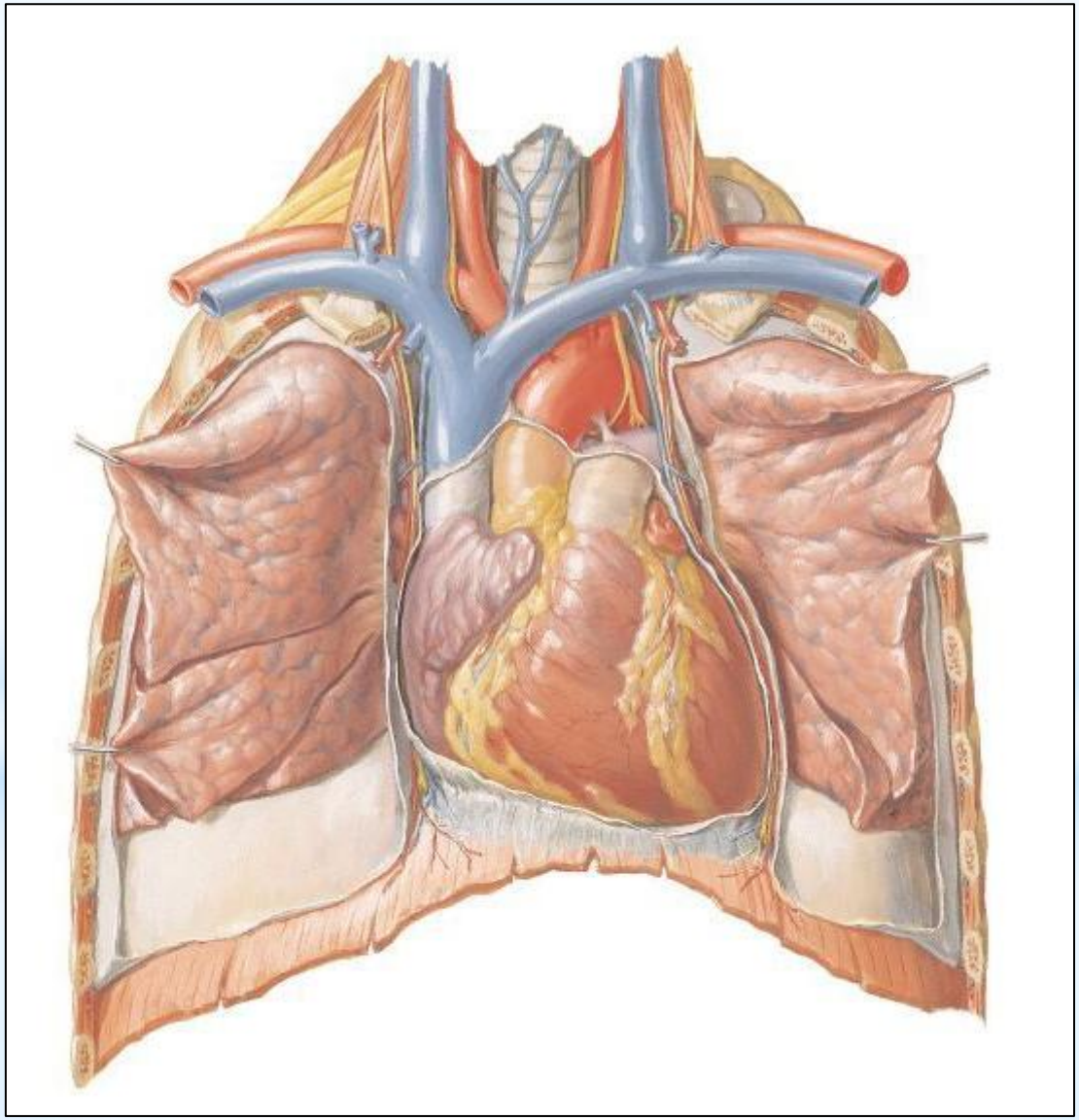
* Sezione longitudinale a livello del piano valvolare.



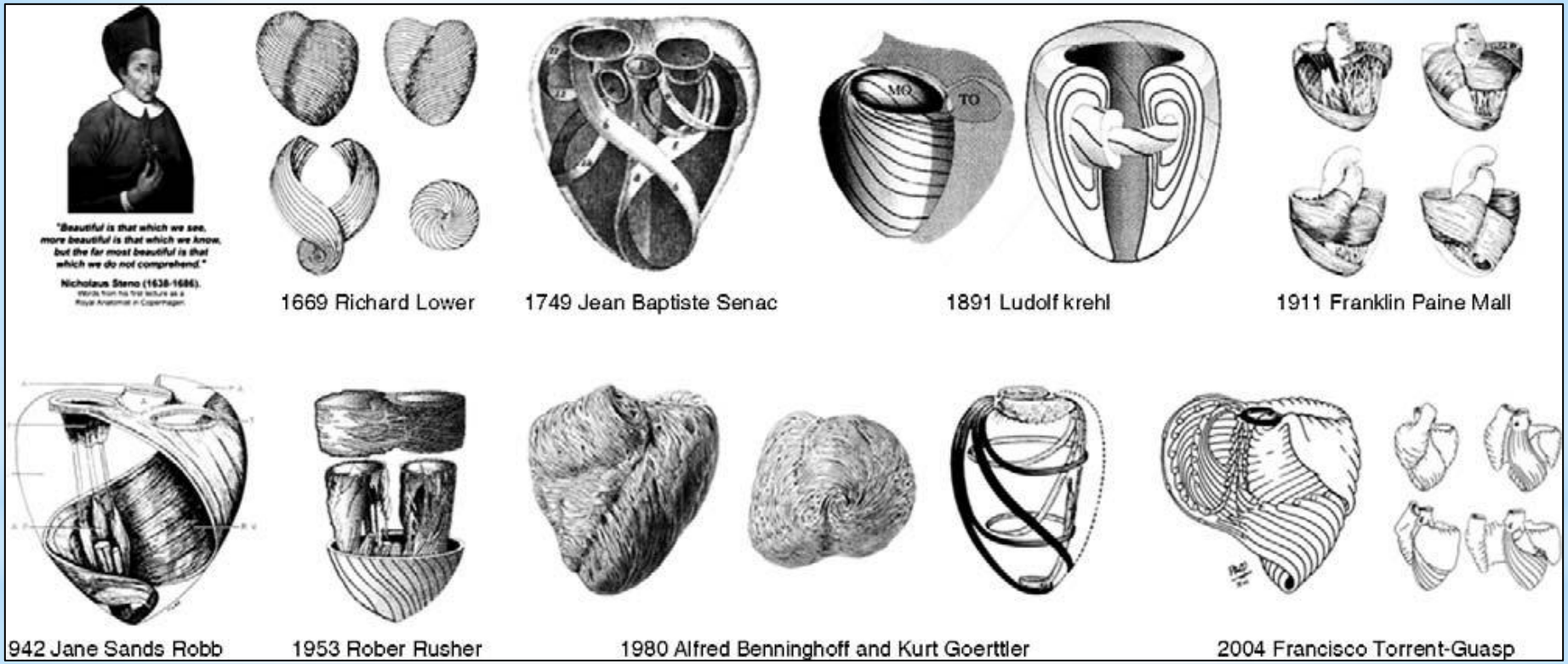
* Sezione sagittale a livello del piano valvolare.



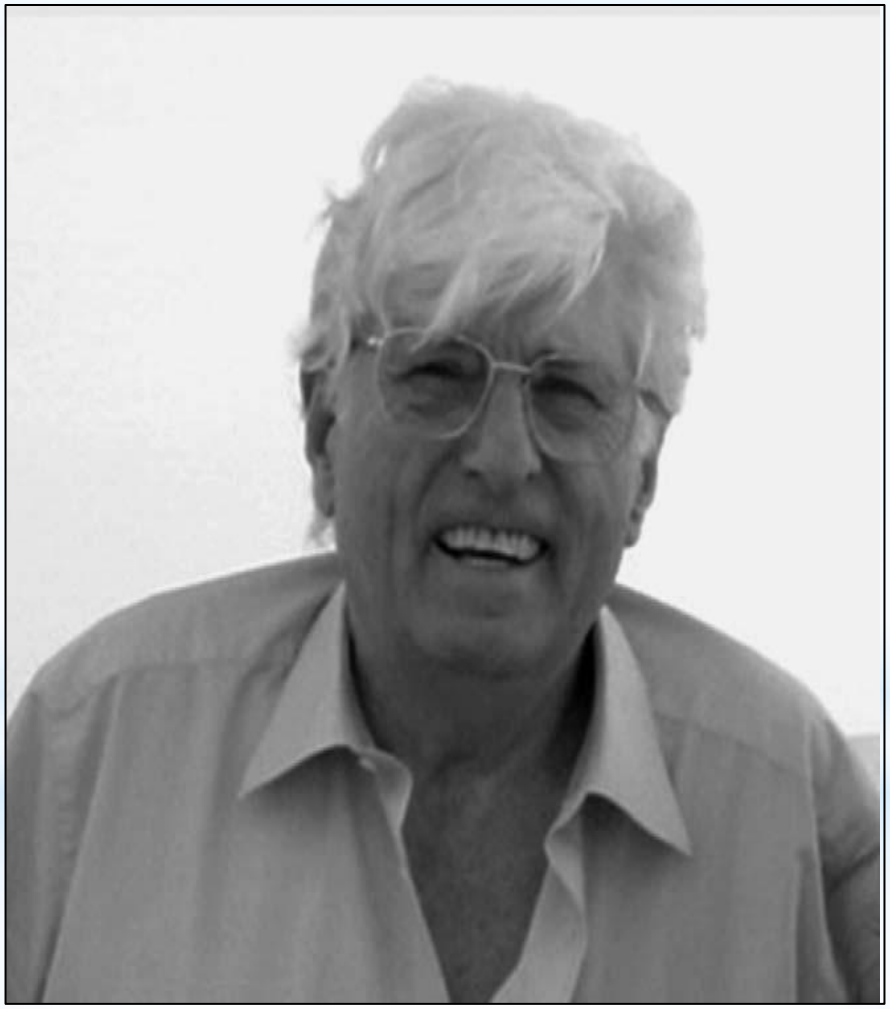
* Struttura interna ed esterna del cuore



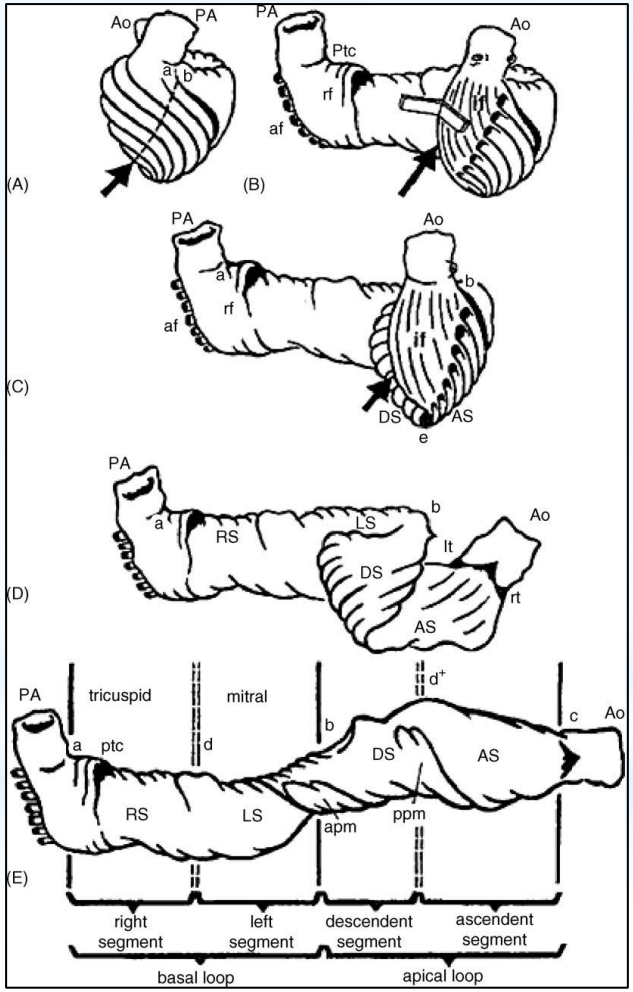
* Posizione del cuore nel torace visto frontalmente



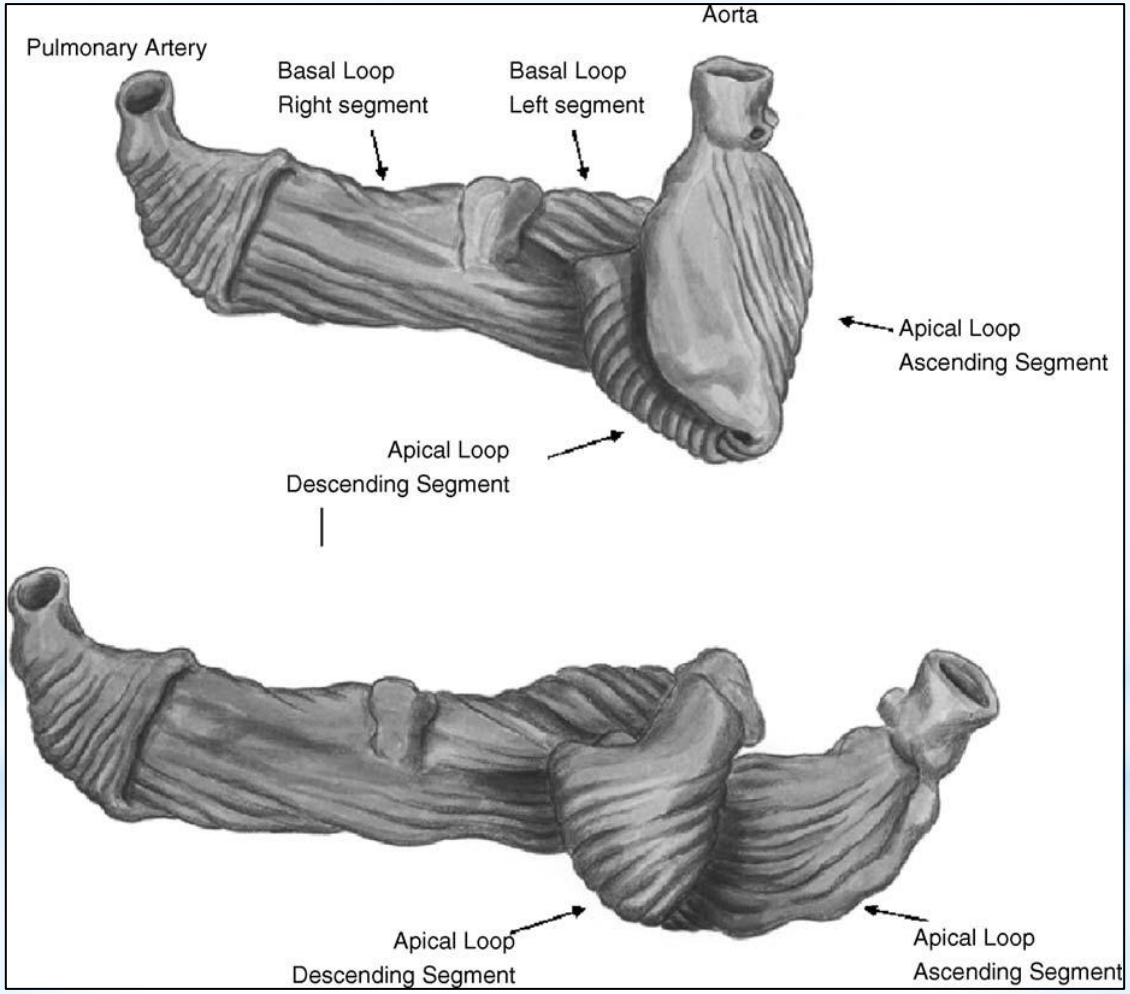
* Illustrated historical timetable of the mayor contributions in understanding the ventricular myocardial architecture.



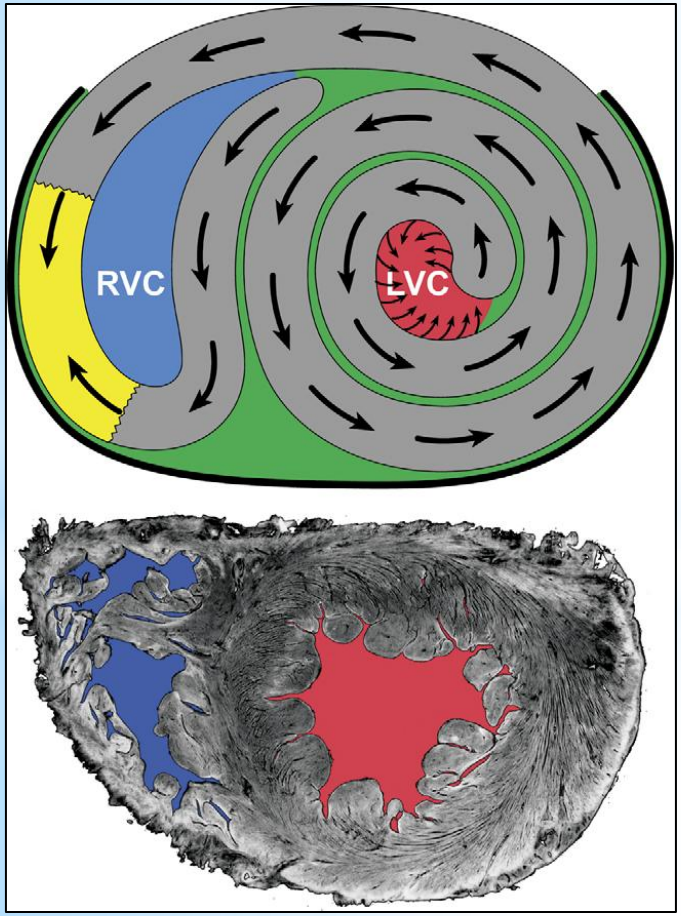
* Francisco (Paco) Torrent-Guasp.



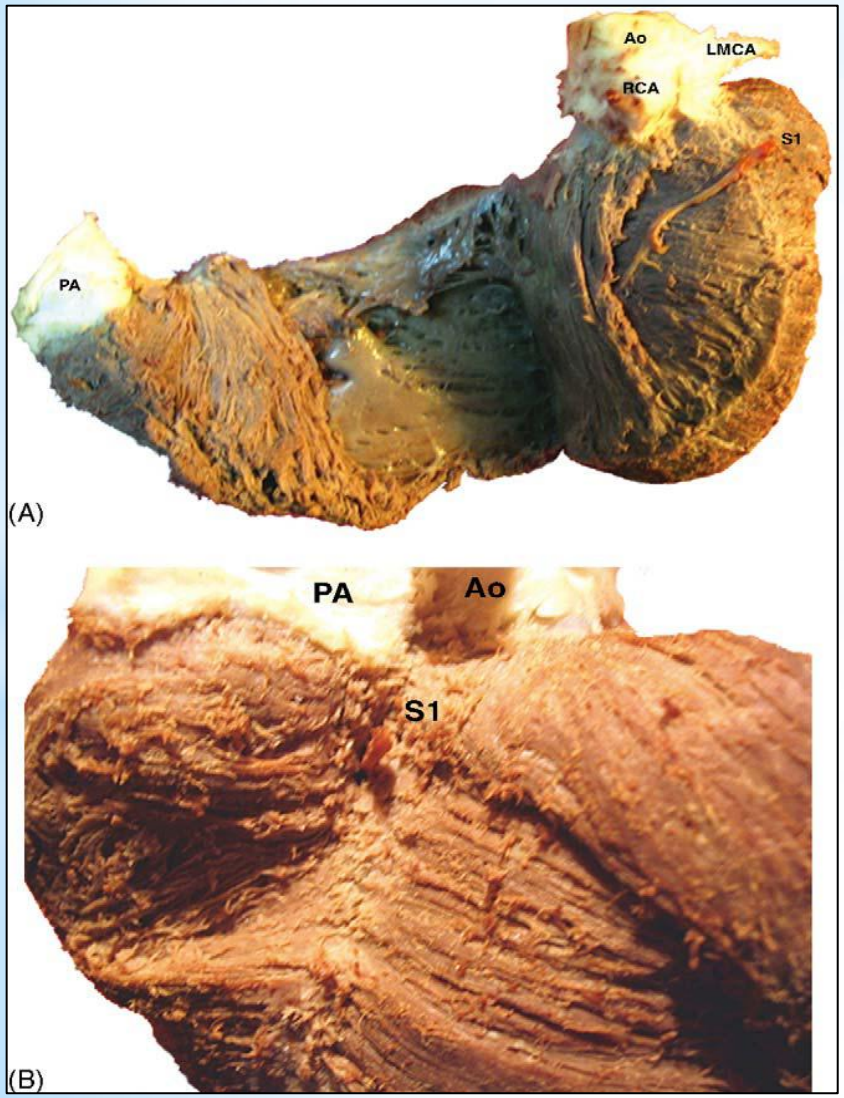
* ‘Unfolding’ of the myocardial band according to Torrent-Guasp (A—D); (E) the sequential segments of the basal and apical loops of the fully extended band.



* Unfolded segments of the helical heart showing the two segments of the basal and apical loops.

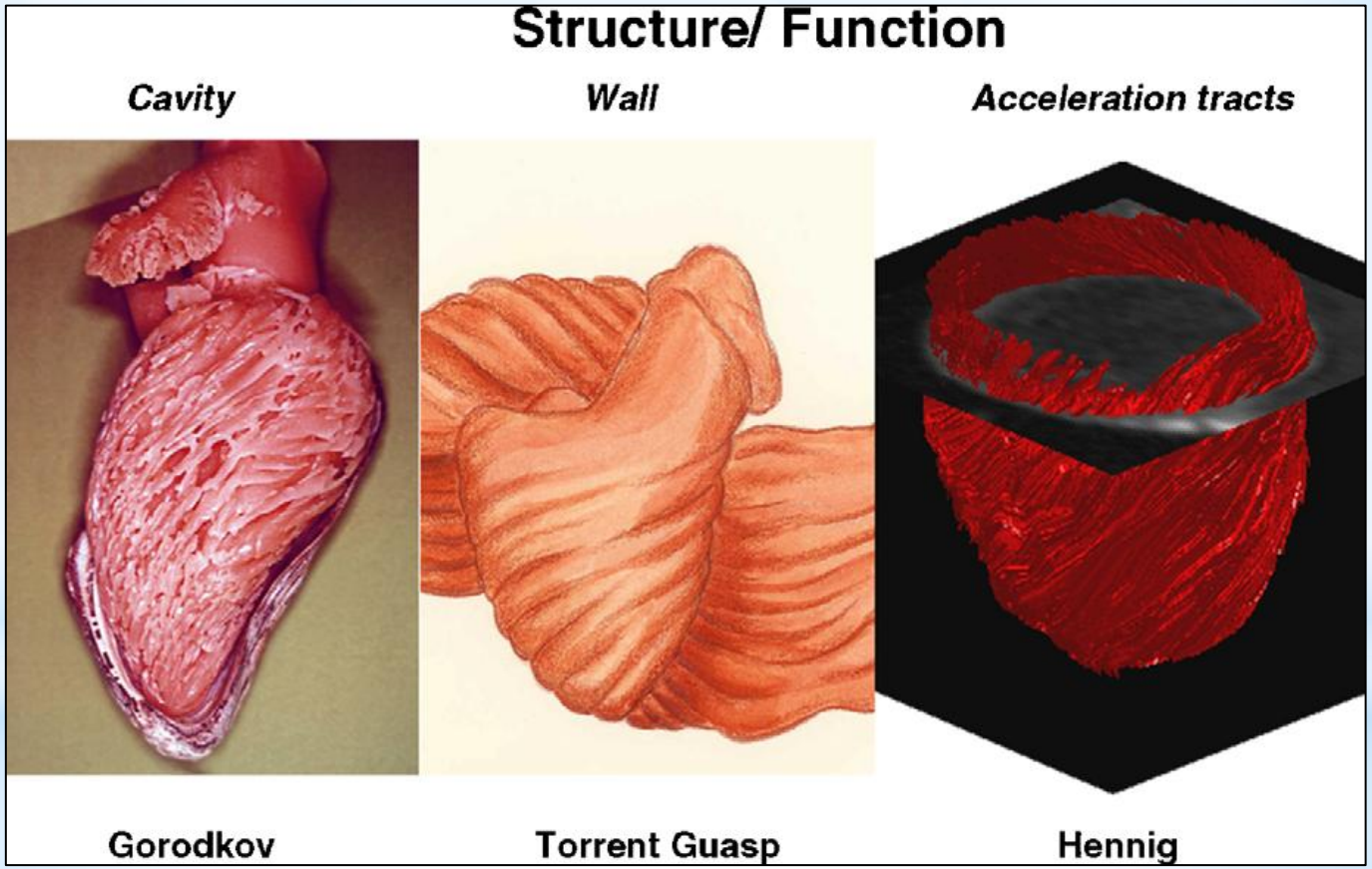


* In the cartoon, the green line represents the fictional cleavage plane, never demonstrated histologically, which was supposed to serve as a hypothetical gliding plane to permit the necessary freedomof motion of a rope in a pulley. Torrent-Guasp had assumed that, by resecting one segment (yellow) from the right ventricular wall, the resulting increment in tension would be transmitted all along the band. Based upon this misassumption, he presumed that a dilated left ventricle would start to shrink. As demonstrated in the lower cross-section through the walls of both ventricles, there is no evidence supporting the existence of such a ‘cleavage plane’. The assumed freedom of motion of the ‘rope in the pulley’ is nothing but fiction because all segments of the alleged rope, in reality, are unified within the overall spatially netted ventricular mesh. RVC: right ventricular cavity (blue); LVC: left ventricular cavity (red); alleged cleavage plane (green); resected segment from the right ventricular free wall (yellow).

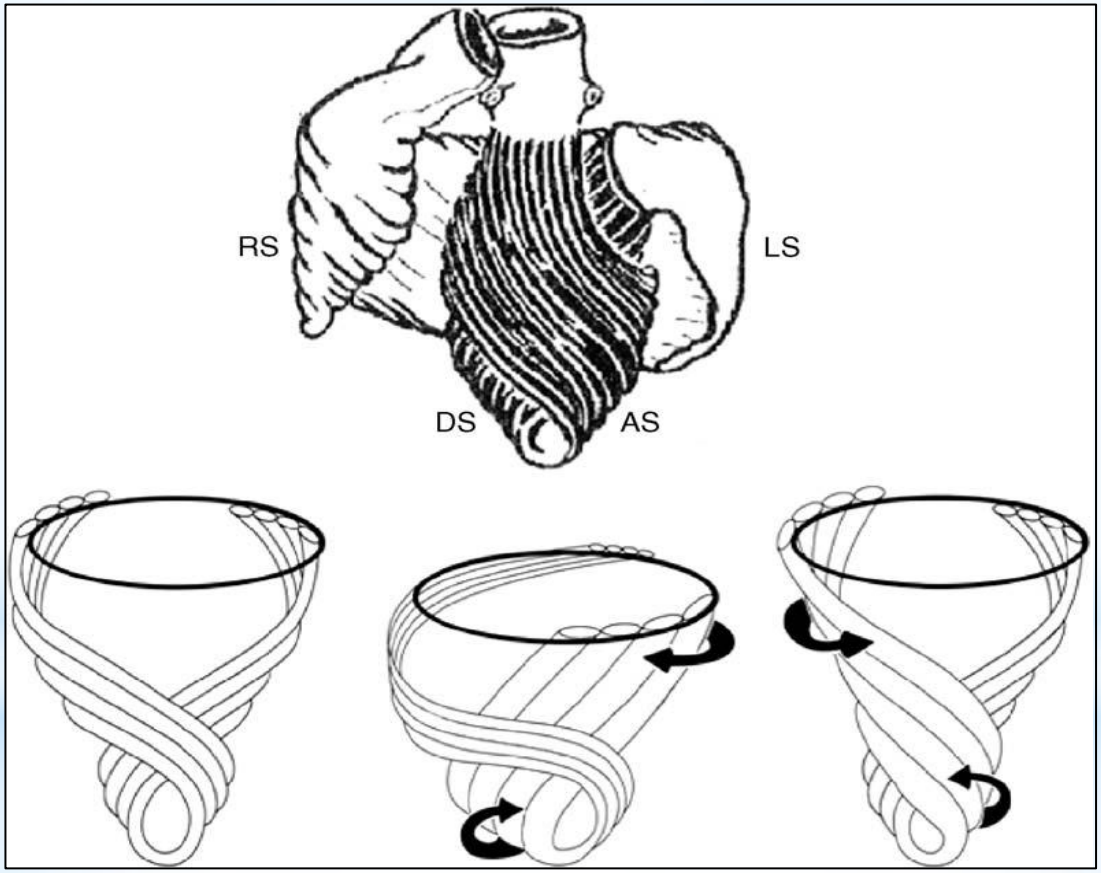


* Right ventricular dissection. Dissection following the ventricular muscular band to separate the right and left ventricular outflow tract (A) with magnification to better show the details (B). Ao, aorta; LMCA, left main coronary artery; PA, pulmonary artery; RCA, right coronary artery; S1, first septal coronary artery branch

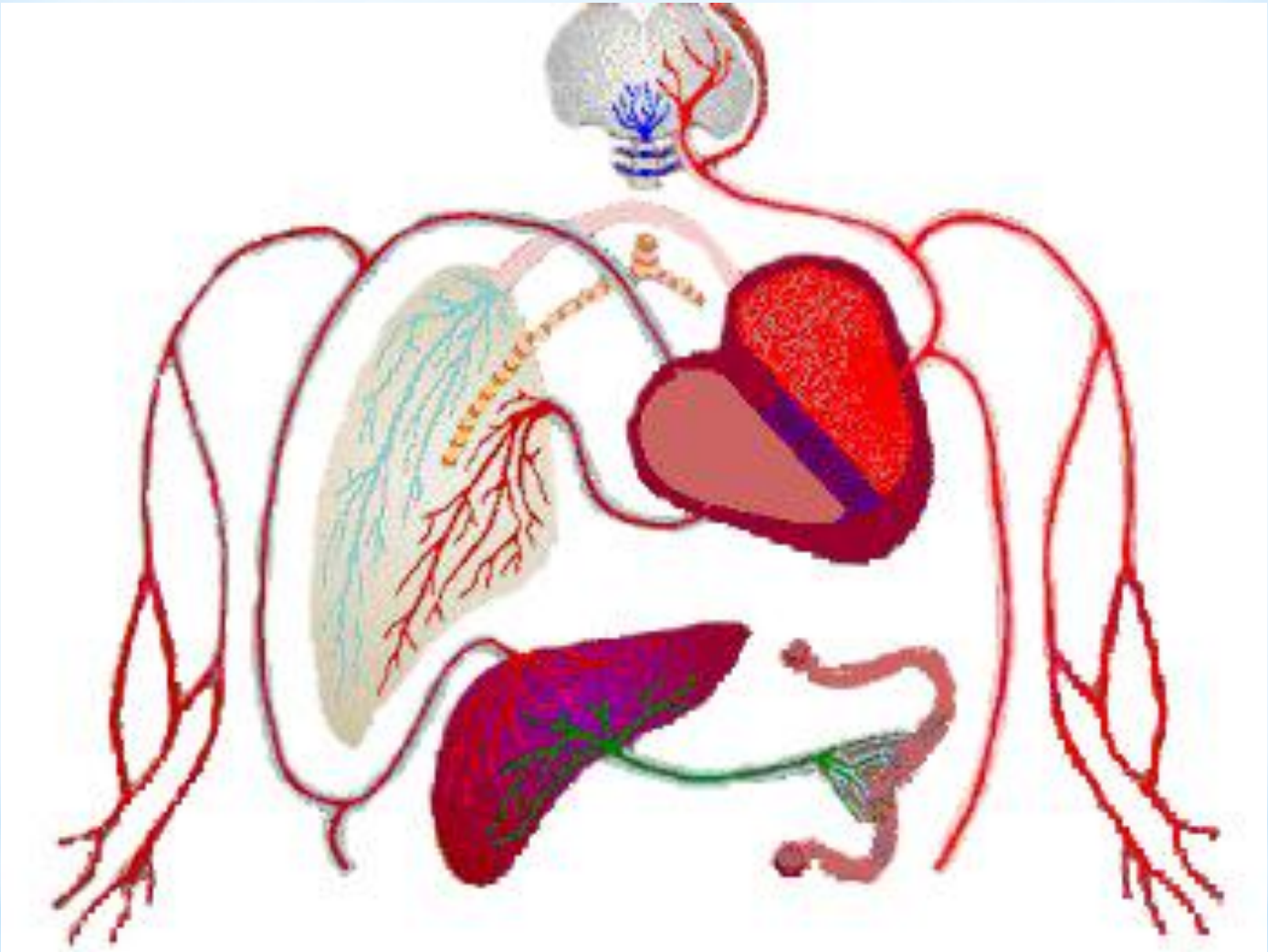
* Fiber orientation relationship of the septum, composed of oblique fibers that arise from the descending and ascending segments of the apical loop, surrounded by the transverse muscle orientation of the basal loop that composes the free right ventricular wall. Note the conical arrangement of the septum muscle and the basal loop wrap, forming the RV cavity.



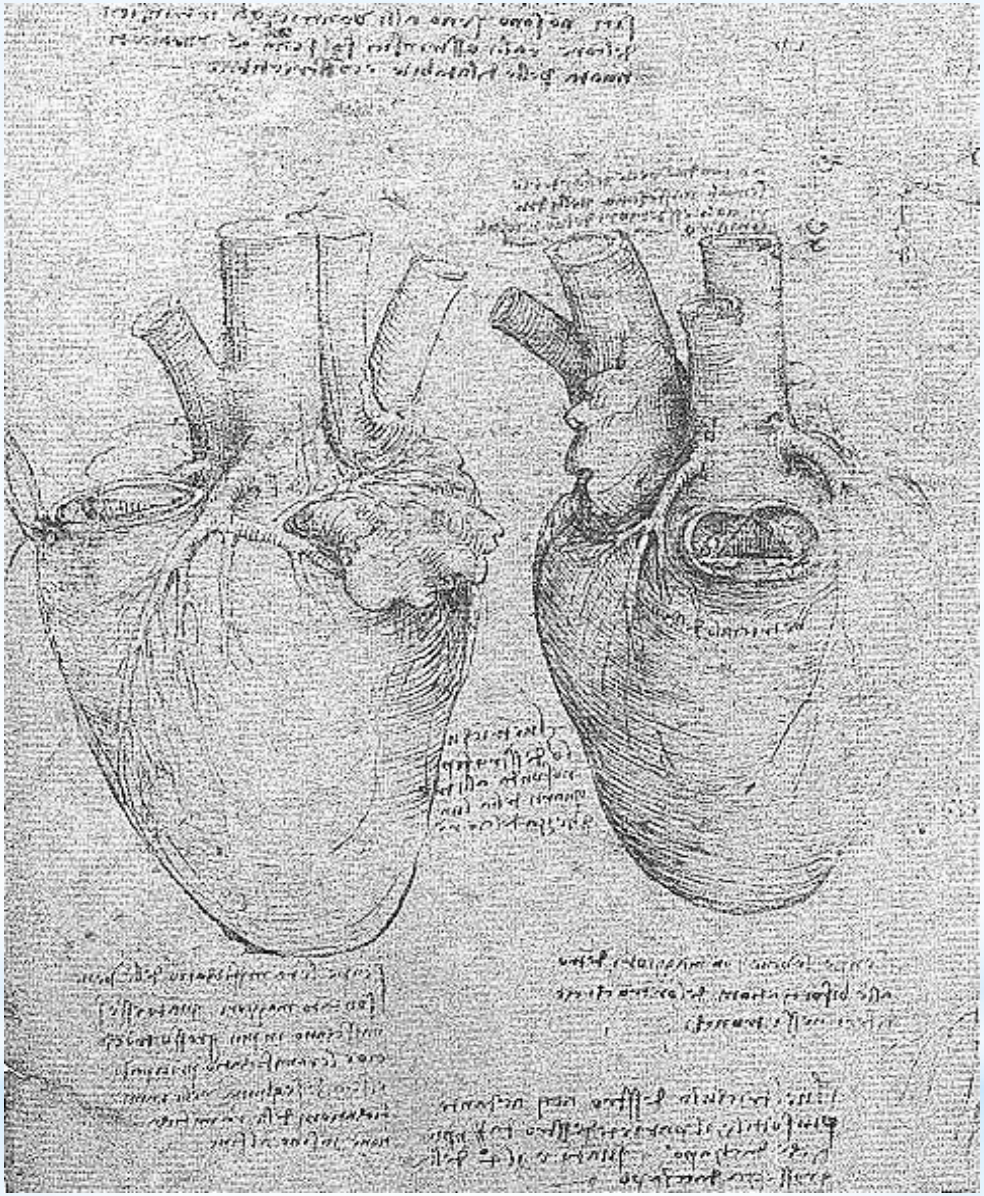
* Comparison of fiber orientation in corrosion casts (left), descending segment of myocardial band (middle) and in-plane velocity component of acceleration tracts by MRI analysis (right).



* Rotation of cardiac base and apex during sequential contraction of myocardial band described by Torrent-Guasp .

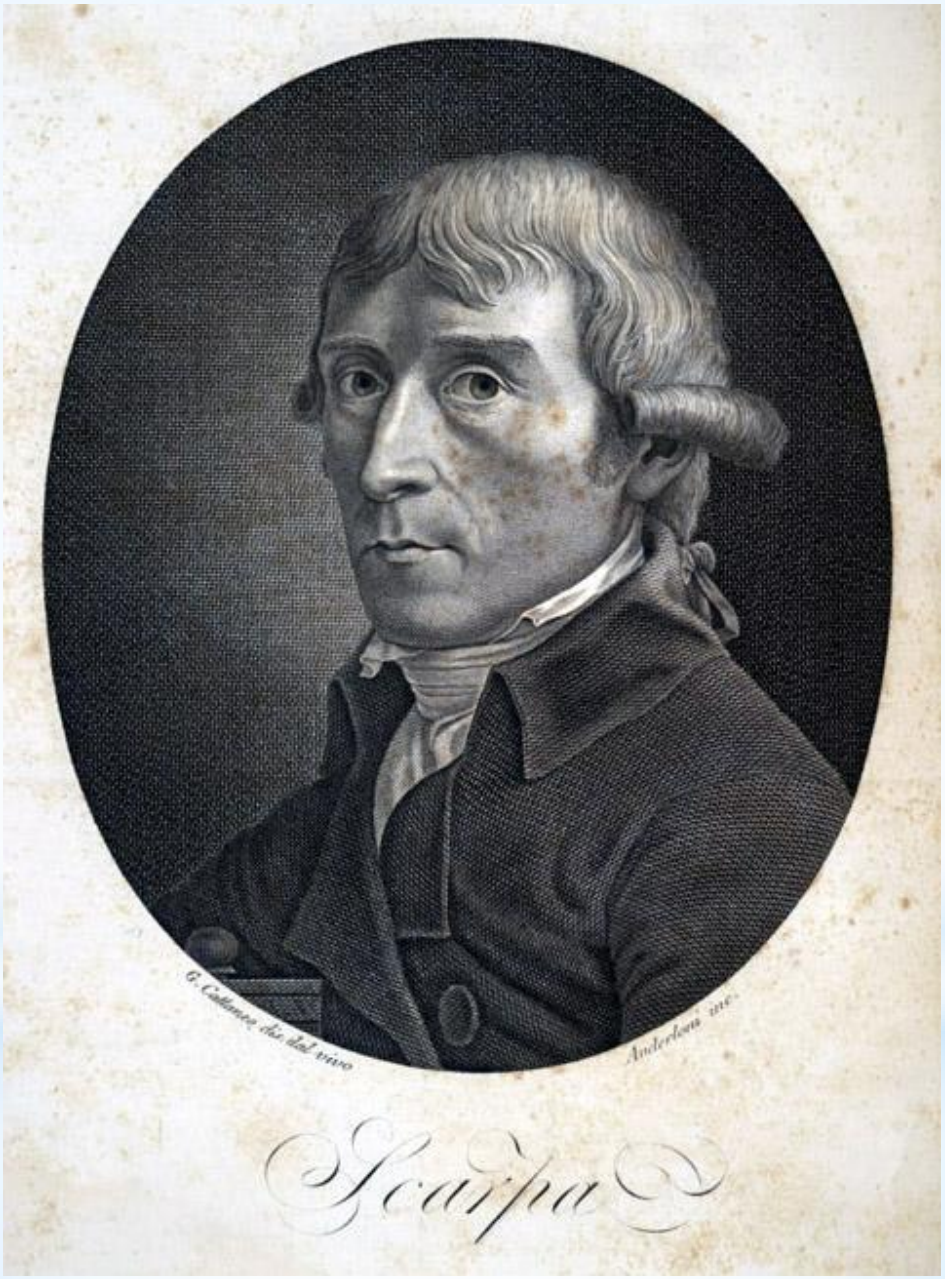


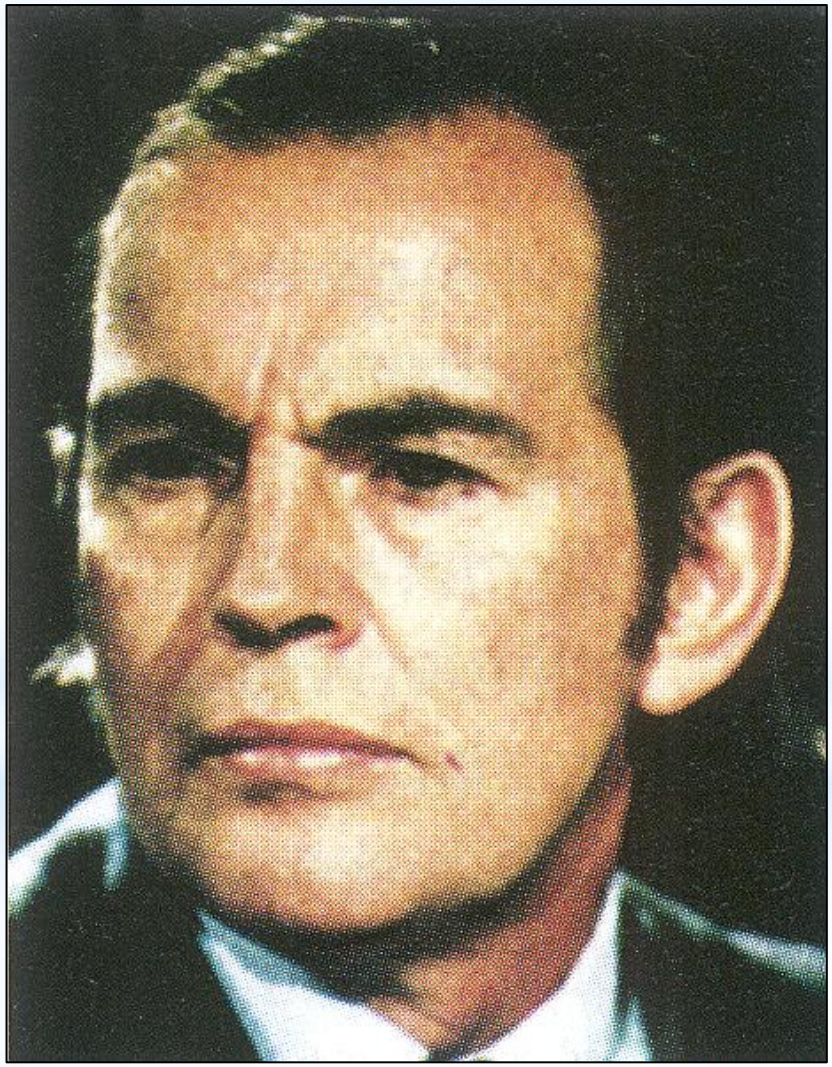
* Il modello di circolazione del sangue secondo Galeno



* Leonardo da Vinci. Cuore. Matita e inchiostro su carta (1500 dc). The Royal Collection, Windsor (U.K)

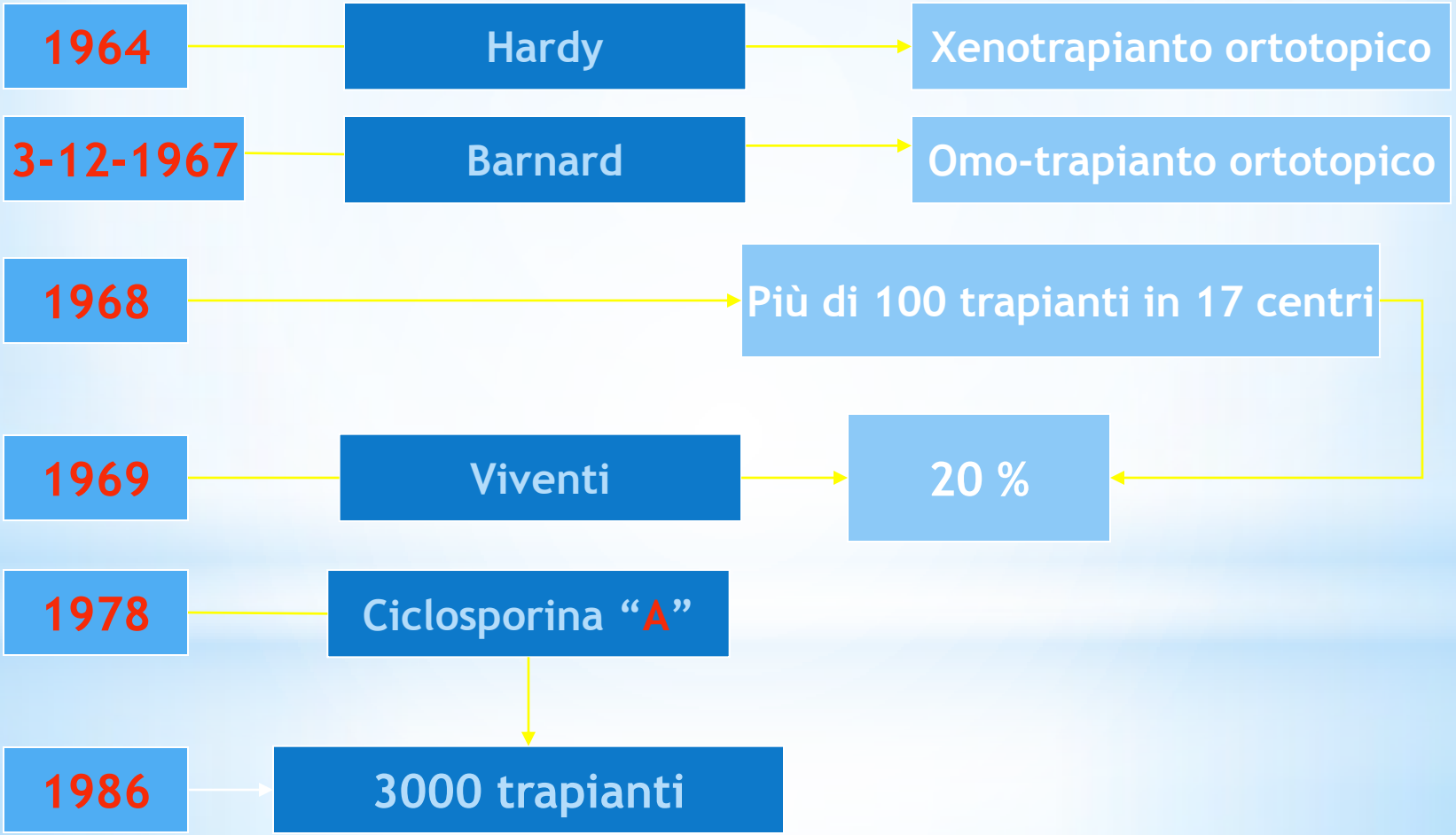
* Il modello di circolazione del sangue secondo Harvey


G. Callaway dal vivo
Anderloni inc.
Scarpa

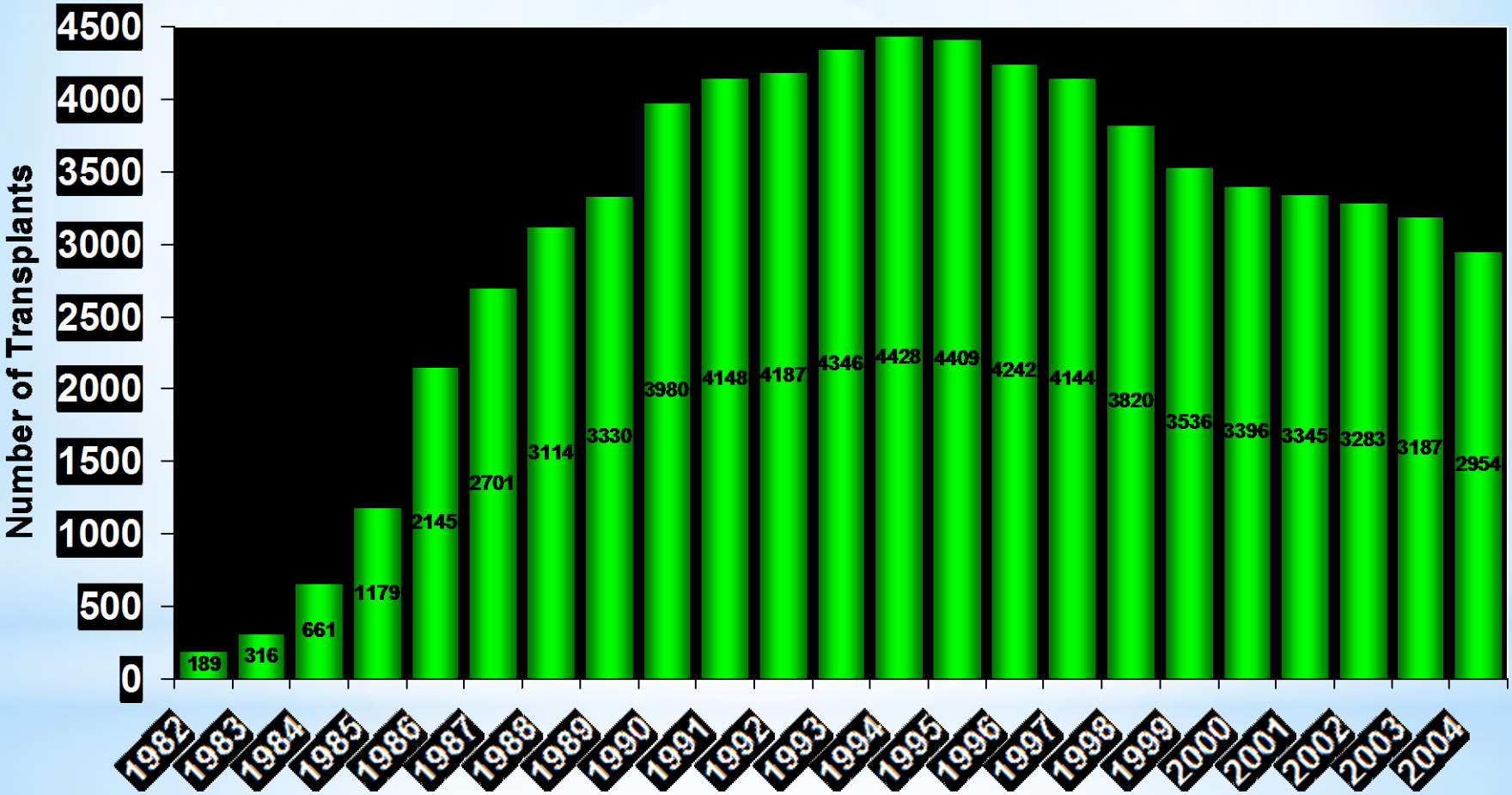


*TRAPIANTO DI CUORE

Fase Clinica



NUMBER OF HEART TRANSPLANTS REPORTED BY YEAR



ISHLT

2006

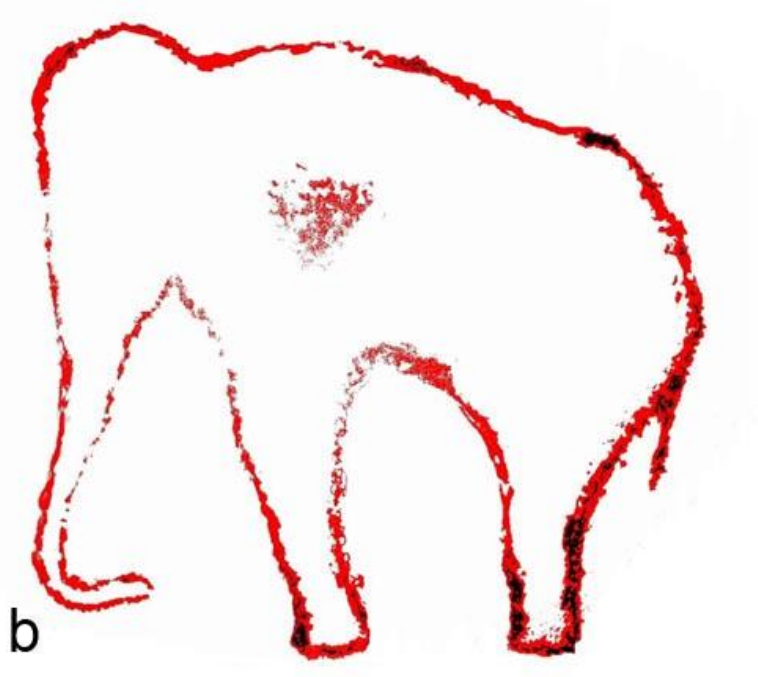
NOTE: This figure includes only the heart transplants that are reported to the ISHLT Transplant Registry. As such, this should not be construed as evidence that the number of hearts transplanted worldwide has declined in recent years.

J Heart Lung Transplant 2006;25:869-79

ENTITA' DEI BATTITI CARDIACI NEL TEMPO	
1 MINUTO	70 BATTITI
1 ORA	5.000 BATTITI
24 ORE	100.000 BATTITI
1 ANNO	50.000.000 BATTITI
80 ANNI	4 MILIARDI DI BATTITI

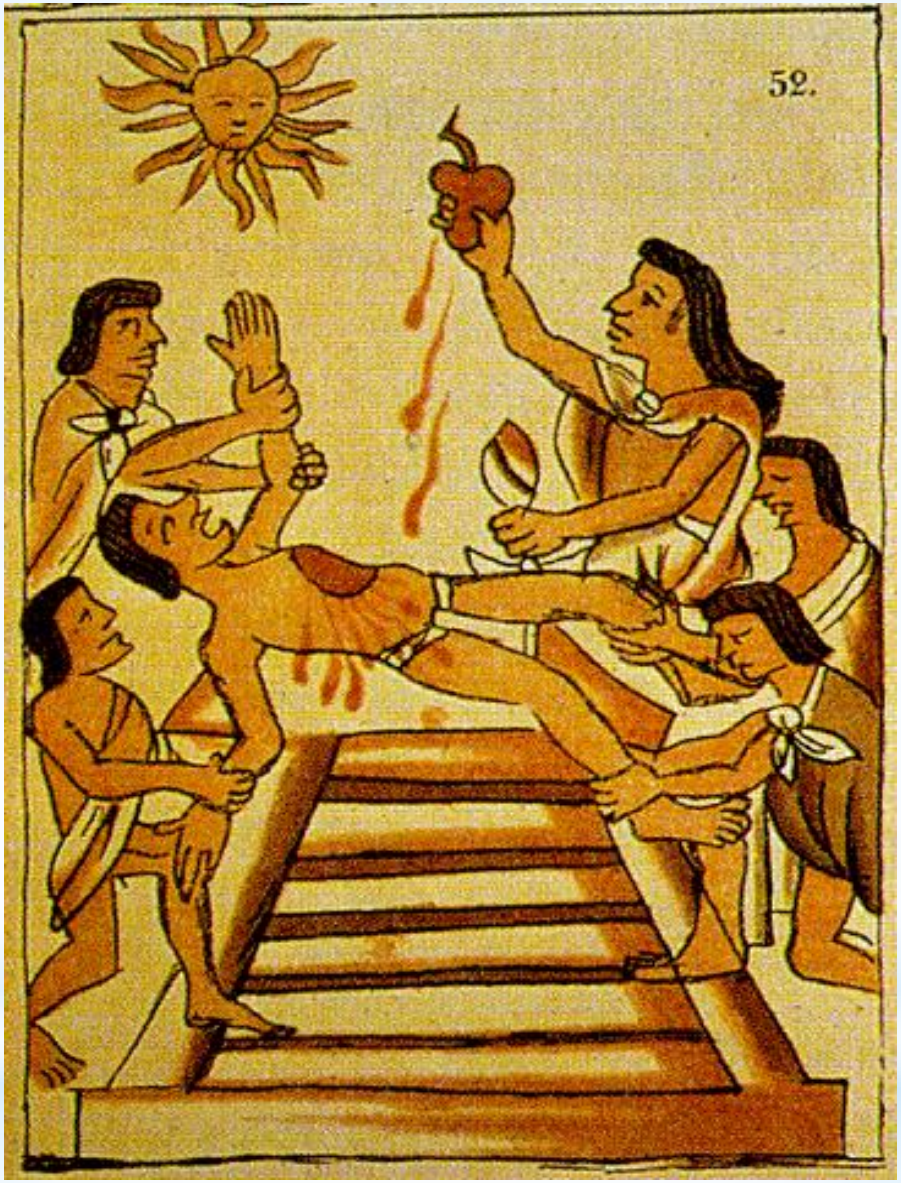
*Senza soffrire il fenomeno della fatica muscolare

ENTITA' DELLA GITTATA CARDIACA DEL SANGUE NEL TEMPO	
1 MINUTO	5-8 L
24 ORE	10.000 L
30 GIORNI	300.000 L
1 ANNO	3.600.000 L
80 ANNI	400 MILIONI L



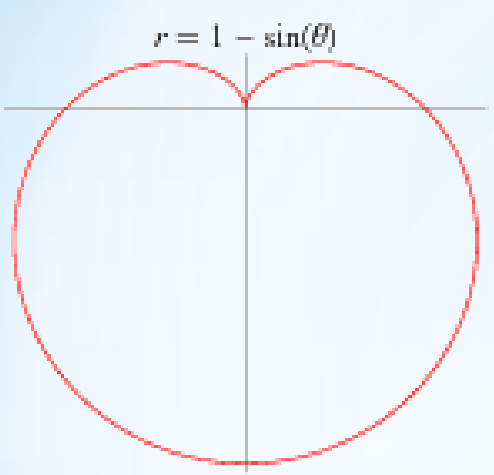
* Grotta di El Pindal. Graffito del proboscidato (**a**). Rielaborazione grafica (**b**)

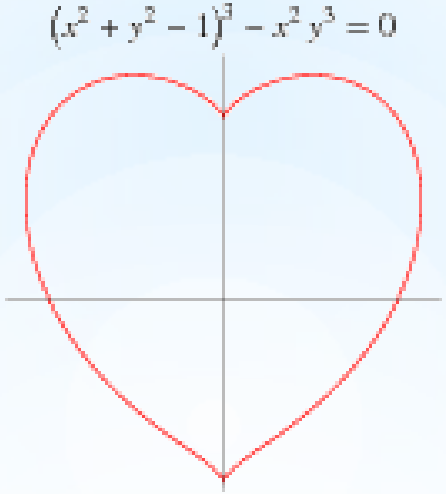
* **Psicostasia. Dal *Libro dei Morti* di Ani (1275 a.C. ca.) British Museum, Londra (*particolare*). Si notino il cuore nel piatto destro della bilancia e la piuma nel sinistro**

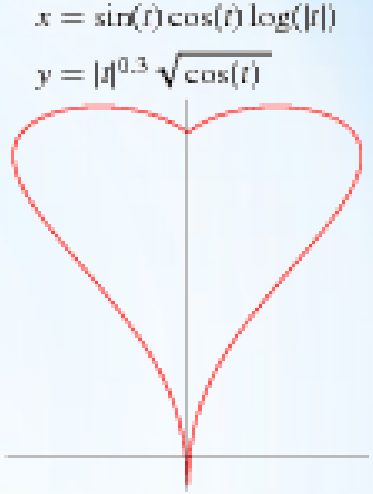


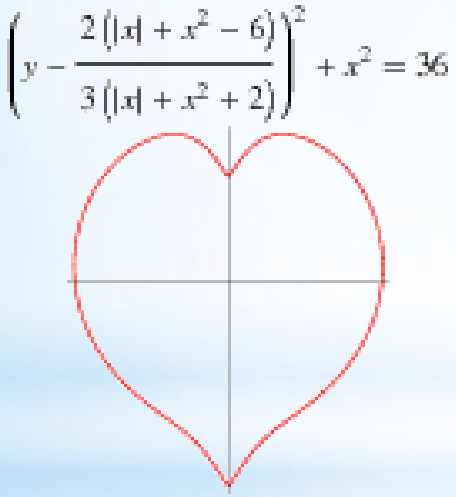
* Sacrificio umano con offerta del cuore. Codice Fiorentino (XVI secolo)
Biblioteca Medicea Laurenziana, Firenze

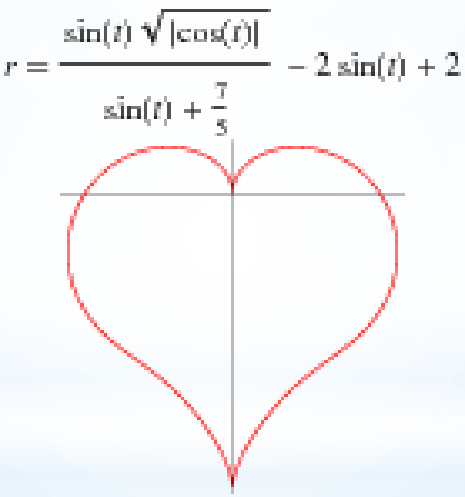
* L’icona classica del cuore

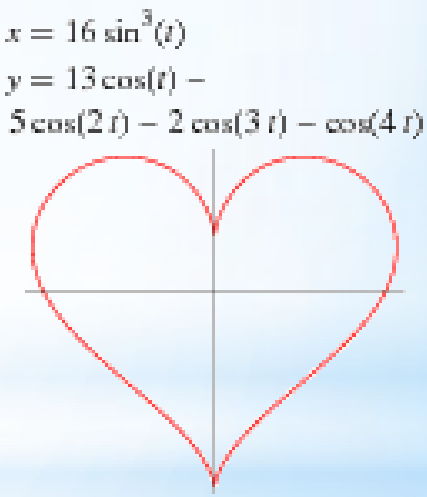




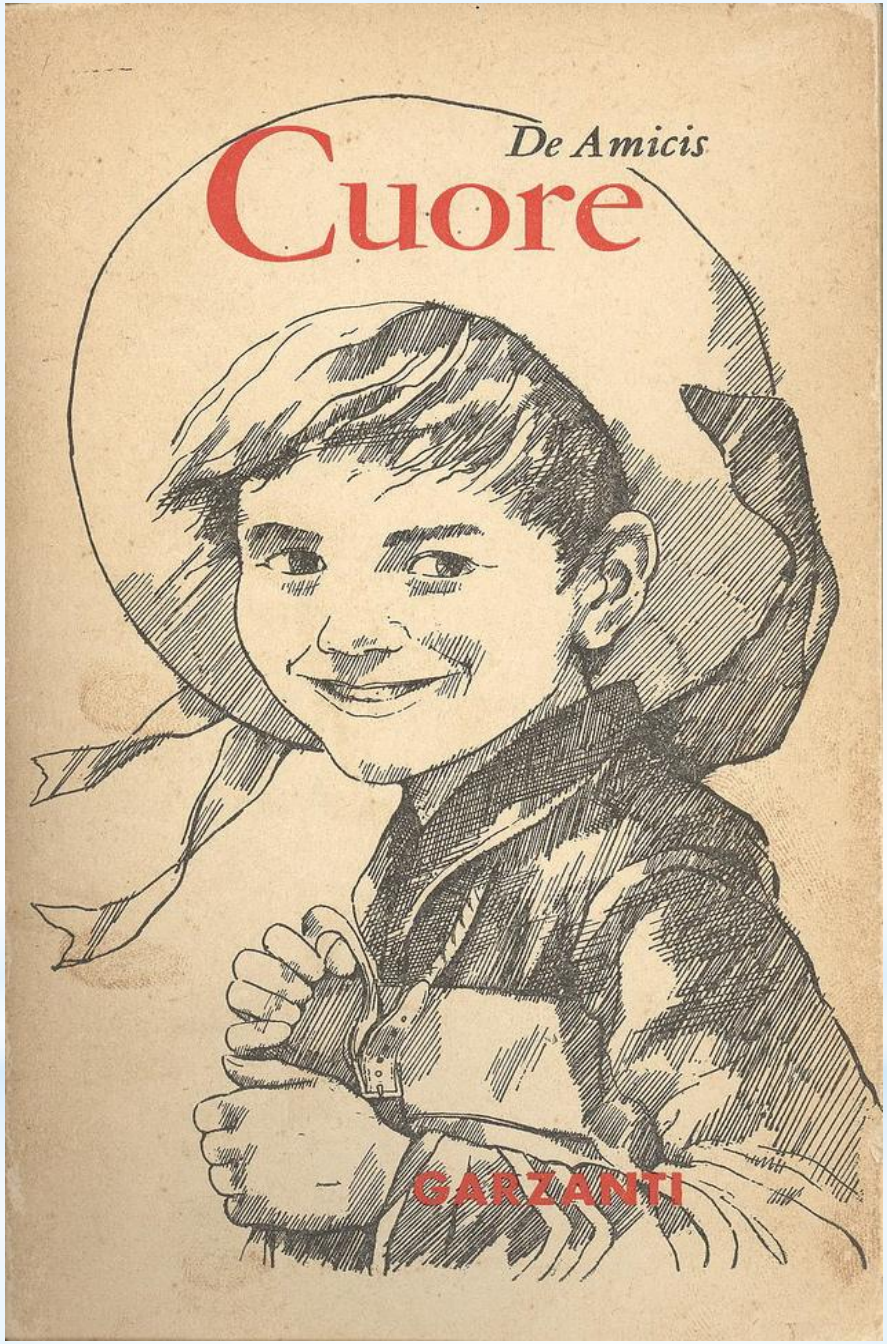


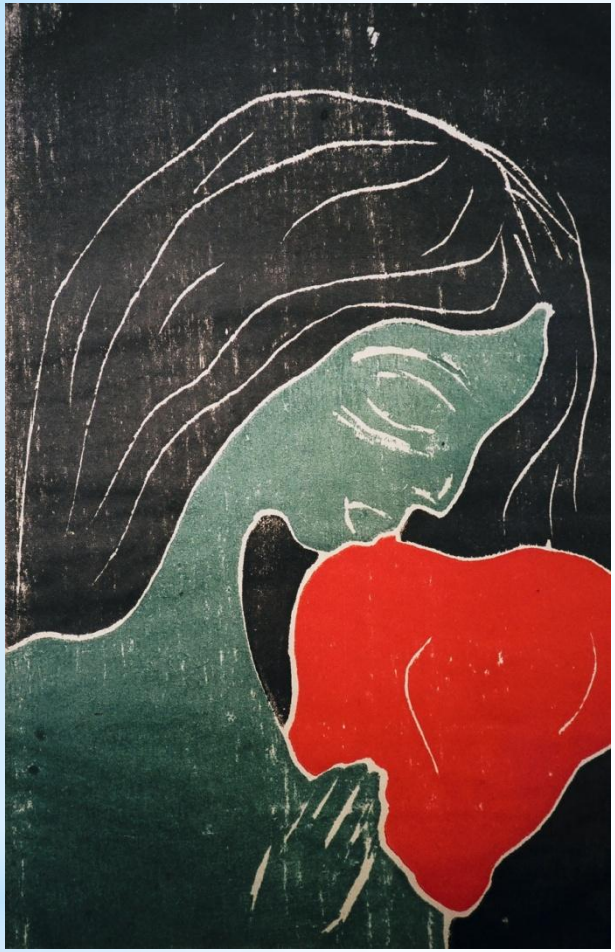






* Curve matematiche “a cuore”. Da [36].


De Amicis
Cuore
GARZANTI

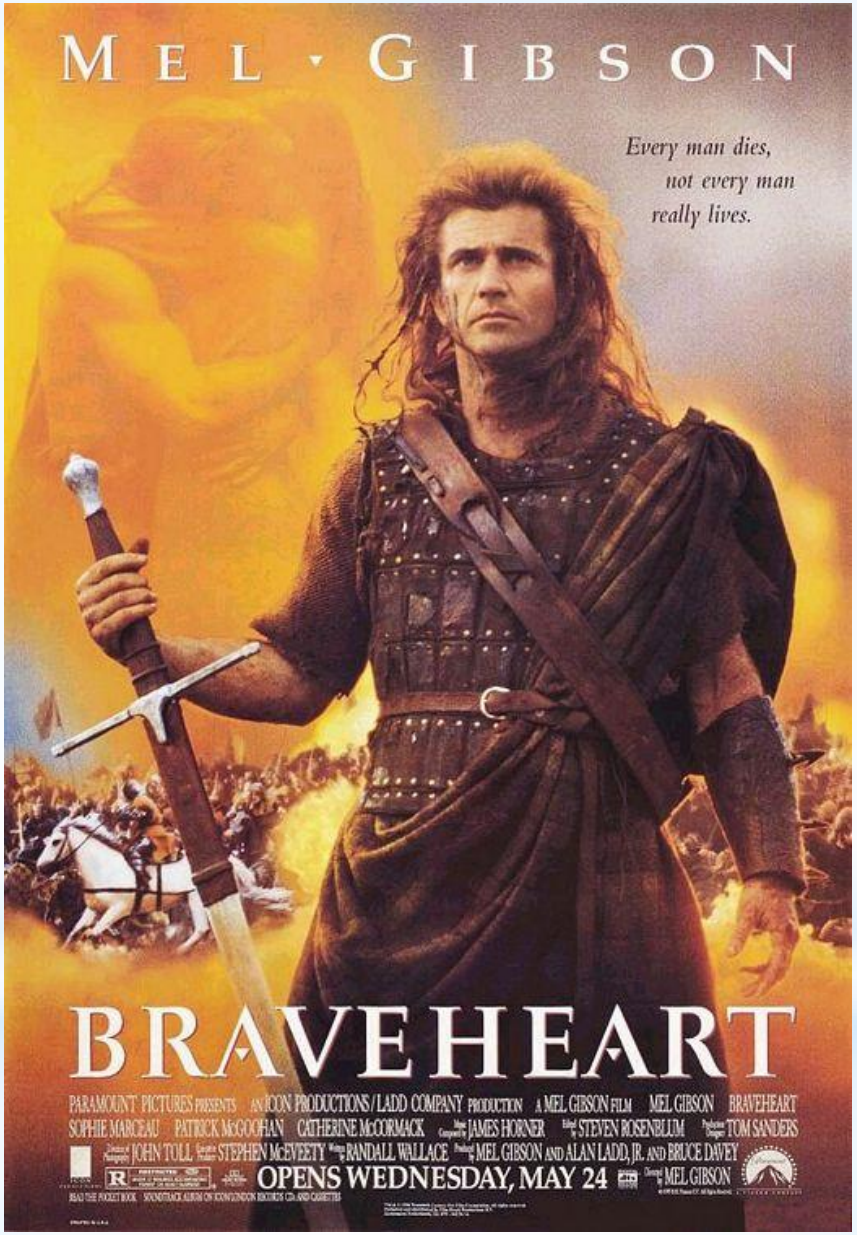


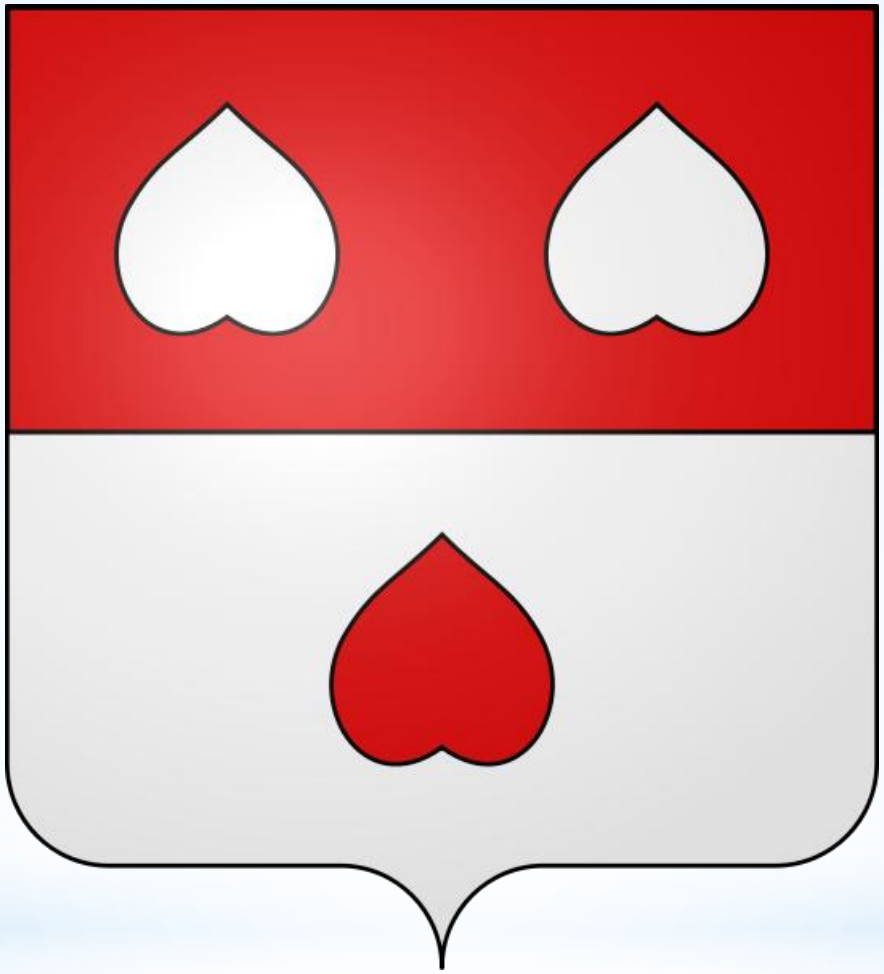
* Edvard Munch. *La ragazza col cuore*. Xilografia (1899)

* Henry Matisse. *Icaro*. Gouache Découpé (1946) Centre Pompidou, Parigi

* Barbara Krafft. *Wolfgang Amadeus Mozart*. Olio su tela (1819). Sammlung Alter Musikinstrumente, Vienna


CUORE MATTO*
LITTLE TONY
Ld A 7500
SANREMO
1967
*
DURIUM
45


MEL · GIBSON
Every man dies,
not every man
really lives.
BRAVEHEART
PARAMOUNT PICTURES PRESENTS AN ICON PRODUCTIONS/LADD COMPANY PRODUCTION A MEL GIBSON FILM MEL GIBSON BRAVEHEART
SOPHIE MARCEAU PATRICK McGOOHAN CATHERINE McCORMACK JAMES HORNER STEVEN ROSENBLUM TOM SANDERS
JOHN TOLL STEPHEN McEVEETY RANDALL WALLACE MEL GIBSON AND ALAN LADD, JR. AND BRUCE DAVEY
R
OPENS WEDNESDAY, MAY 24
MEL GIBSON



* Stemma araldico di Bartolomeo Colleoni, Italia

* Emidracma di Pergamo. Bronzo (III secolo a.C.)

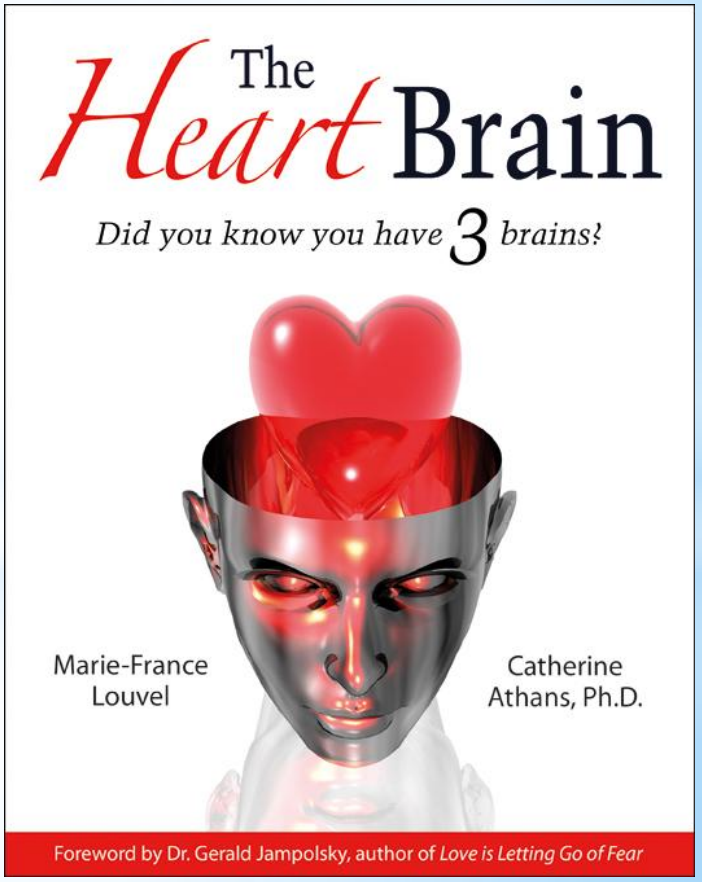
* Banconota da 50 franchi (dritto), Francia (1940)

* Francobollo da 700 pesos. Giornata mondiale contro il fumo di tabacco. Argentina (1980)


10
J
Q
K
A

* Logo di “Cuore granata”

* Raffaello Sanzio. *La Scuola di Atene*. Affresco (1509-11) (*particolare*). Musei Vaticani, Roma



* Marie France Louvel e Catherine Atans. The Heart Brain (2011)

Grazie per l’attenzione.